

# Source Control Proposed Plan

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WILCOX OIL COMPANY, BRISTOW, OK

JULY 10, 2018---DRAFT



# Purpose

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Provide Site Background Information

Present the Cleanup Alternatives Considered for Source Material

Describe the Preferred Alternative to address Source Material

Solicit the Public's Review and Comment

# Community Involvement

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## Site documents can be found at:

- Bristow Public Library
- Oklahoma Department of Environmental Quality

## Web Resources

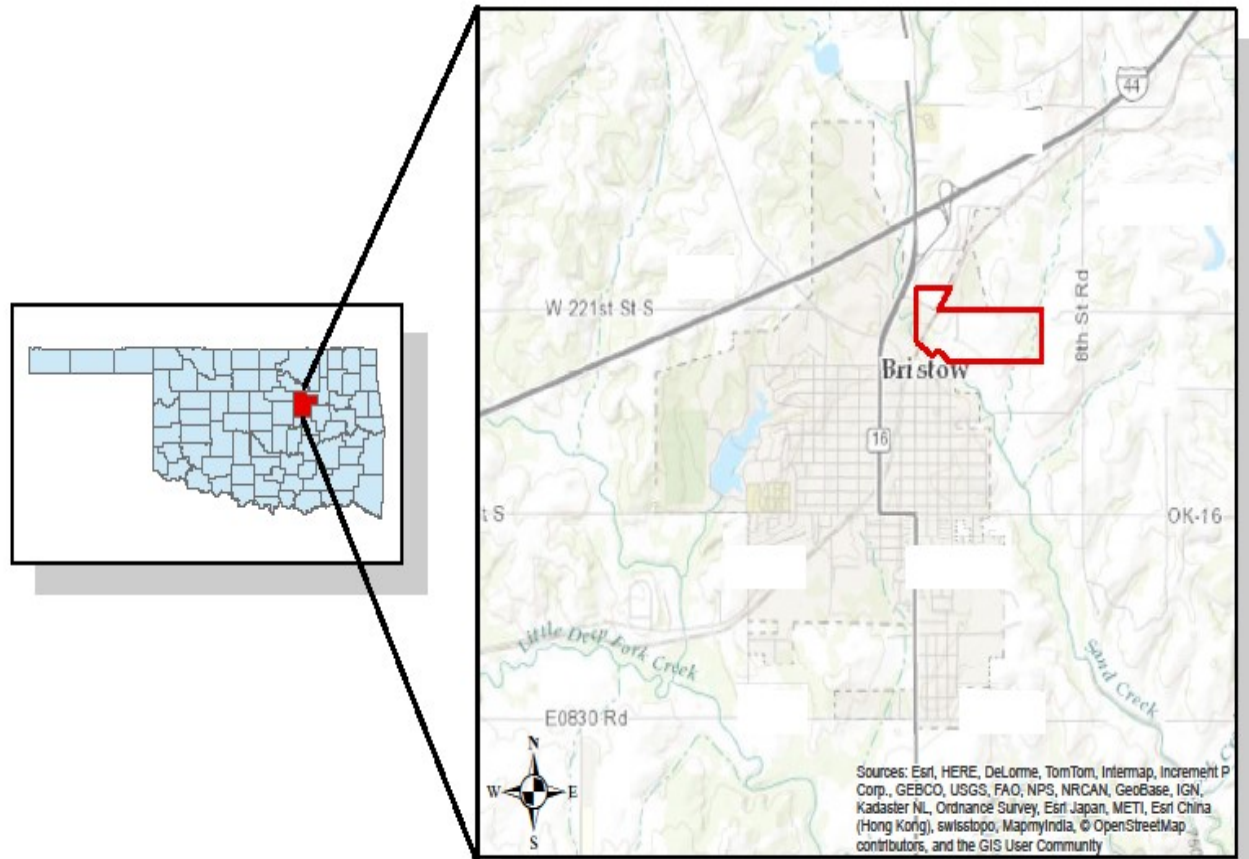
- ODEQ: [www.deq.state.ok.us/lpdnew/index.htm](http://www.deq.state.ok.us/lpdnew/index.htm)
- U.S. EPA: <http://www.epa.gov/superfund/wilcox-oil>

## Comment Period

- June 28 Through July 31, 2018
- Submit oral comments today.
- Submit written comments today, or by postal mail, or by electronic mail
- EPA's responses to all comments:
- "Responsiveness Summary" of the "Record of Decision."

# Site Location

The Site is situated NE of Bristow, Creek County, Oklahoma



# Site Background

Operation:  
Oil Refinery

Activity Period:  
1915 through 1963

Size:  
about 140 to 150  
acres

Listed:  
December 12, 2013



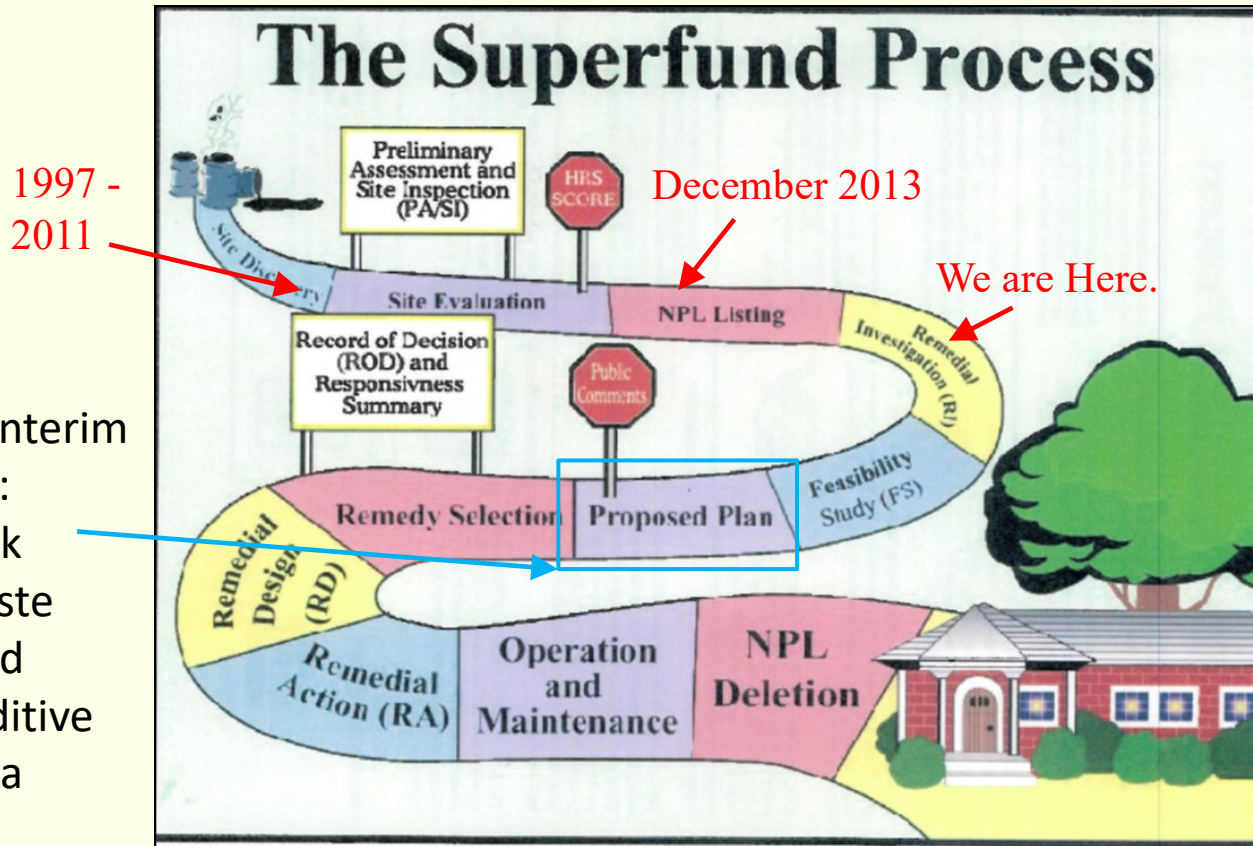
1950s Aerial Photograph



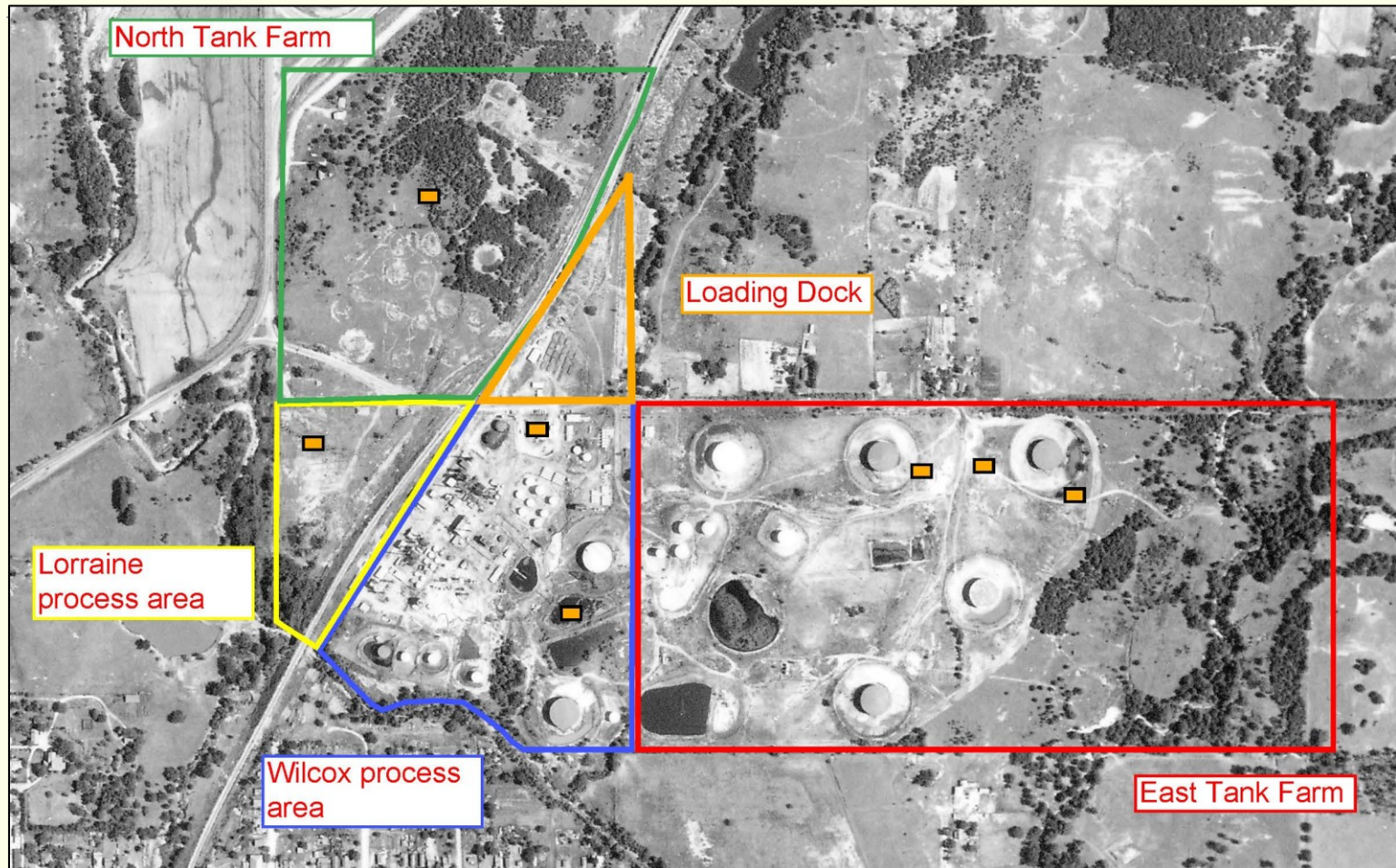
# Superfund Process – Project Status

Remedial Investigation-  
collect data to:

- Determine Site conditions
- Determine nature of contamination
- Evaluate risk from the Site to human health and environment

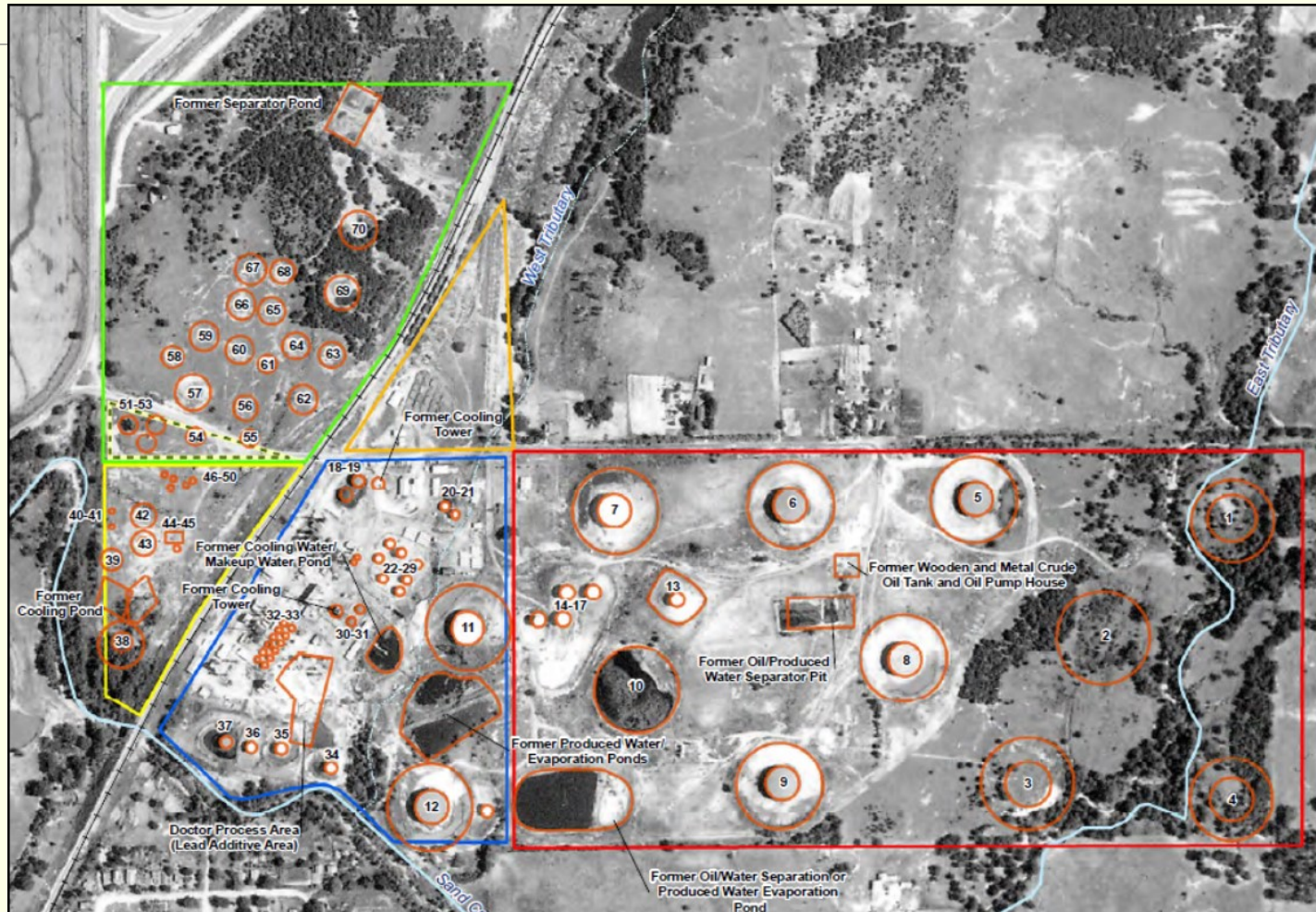


# Remedial Investigation – 5 Operation Areas





# Remedial Investigation – Facility Features

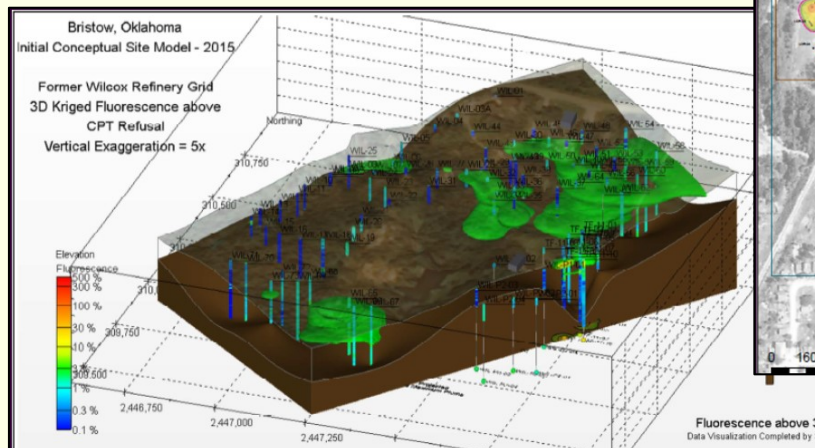
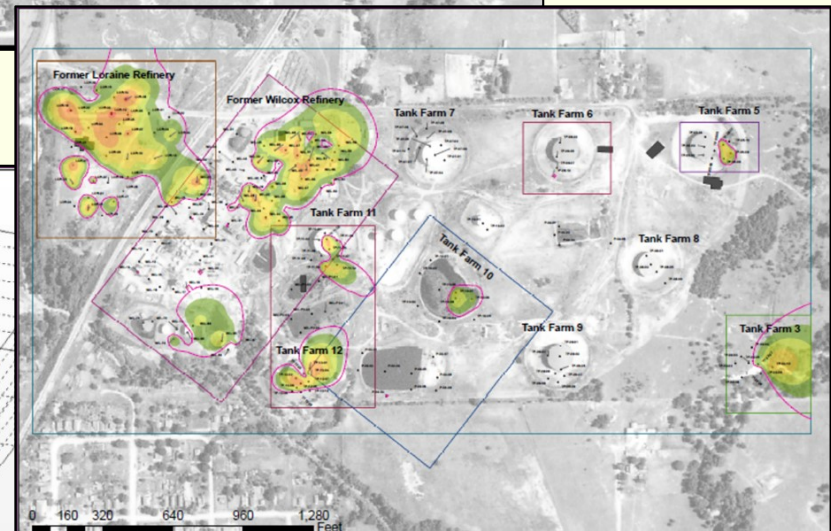
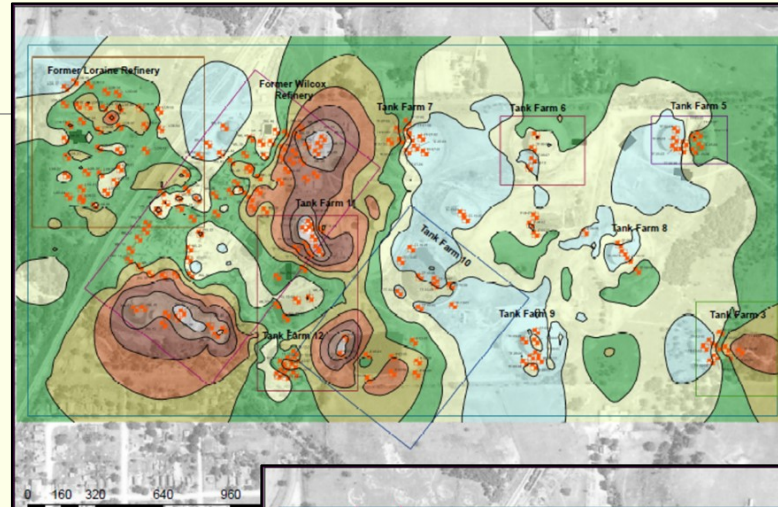




# Remedial Investigation – Phase Approach

## Phase 1 – Site Screen

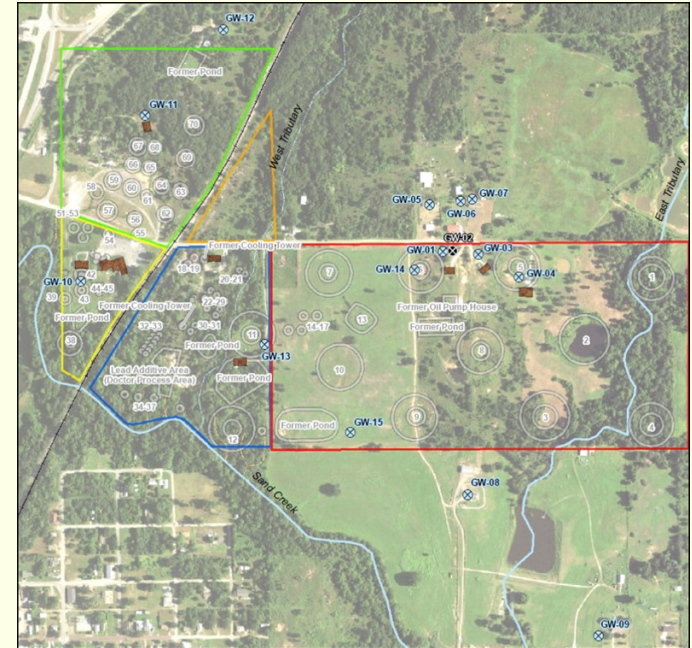
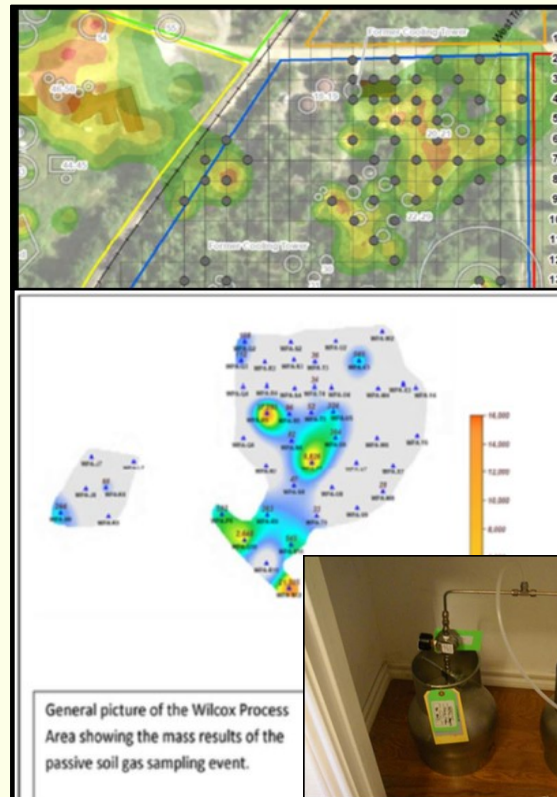
- Residential Soil and Ground Water Sampling
- Fencing Waste Areas
- Geophysics
- Direct Sensing



# Remedial Investigation – Phase Approach

## Phase 2 – Data Collection over multiple field events

- Ground water
- Soil gas and indoor air

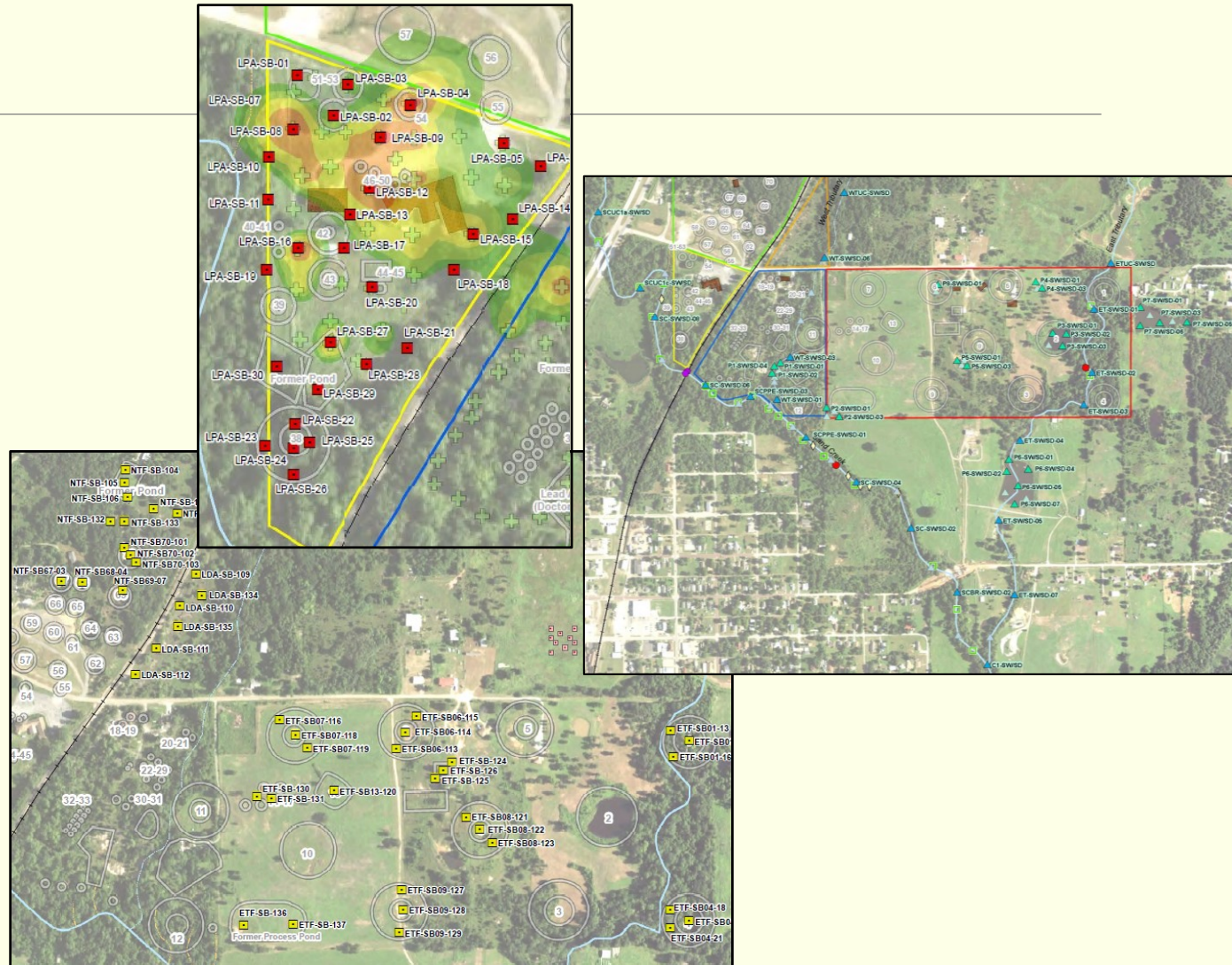




# Remedial Investigation – Phase Approach

## Phase 2 – Data Collection over multiple field events

- Soils
- Surface water
- Sediment
- Sources





# Remedial Investigation – Sources

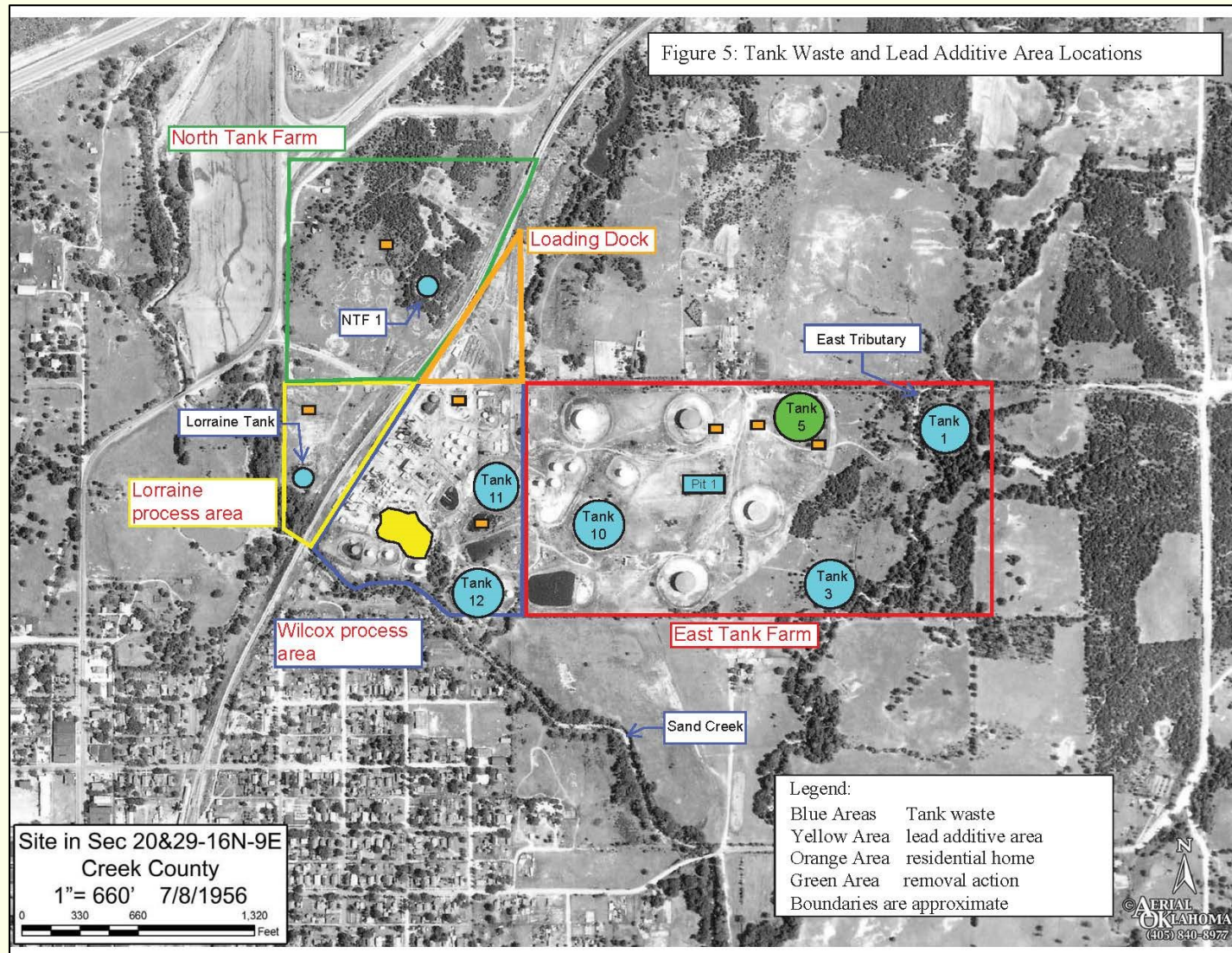
## Source Identification

- Tank waste
- Lead Additive Area





# Remedial Investigation - Sources



# Streamlined Feasibility Screen

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- Current field data
- Presumptive Remedy Approach
- Focus on Effectiveness, Implementability, and Cost
- Multiple Technologies Reviewed
  - Capping
  - Excavation
  - Treatment

Result: two alternatives identified for further evaluation

- Excavation, Treatment and Offsite Disposal
- Excavation, Treatment, Consolidation, Capping



# Alternatives Evaluated

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Alternative 1: No Action

Alternative 2: Excavation, Treatment and Offsite Disposal      \$4,135,294

Alternative 3: Excavation, Treatment, Consolidation, Capping      \$4,633,269

Source Material Health-Based Target Levels <sup>1</sup>			
Contaminant	Data Results (mg/kg)	Health Based Target Level (mg/kg)	Health-Based Target Level Basis
Lead	105,000	800	Protection of blood lead levels in workers
Benzo(a)pyrene	12	0.11	Residential Cancer Screening Number at 10 <sup>-6</sup> Risk
1- Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2017 mg/kg = milligram per kilogram			

# Comparison of Alternatives

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## ALTERNATIVE 2: EXCAVATION, TREATMENT AND OFFSITE DISPOSAL

Protective and Meets Regulations  
Treatment of Lead Source  
Sources Removed- Disposed Offsite  
Estimated 4 months to complete  
\$4,135,294  
Limited/Temporary Restrictions  
Five-Year Reviews  
No Operations and Maintenance

## ALTERNATIVE 3: EXCAVATION, TREATMENT, CONSOLIDATION, CAPPING

Protective and Meet Regulations  
Treatment of Lead Source  
Sources Consolidated-Onsite  
Estimated 6 months to complete  
\$4,633,269  
Land Restrictions  
Five-Year Review  
Operations and Maintenance

# Alternative Proposed

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Excavation, Treatment, and Offsite Disposal

\$4,135,294

Areas of Remediation – Estimated Volumes	
Area Name	Volume Estimated (cubic yards)
Lorraine Waste	953
Lead Additive Area	2269
Tank 1	3,323
Tank 3	3,608
NTF-1	818
Tank 10	9,902
Tank 11	431
Tank 12	4,788
Pit 1	4,270
Total	30,362 (5 Acres)

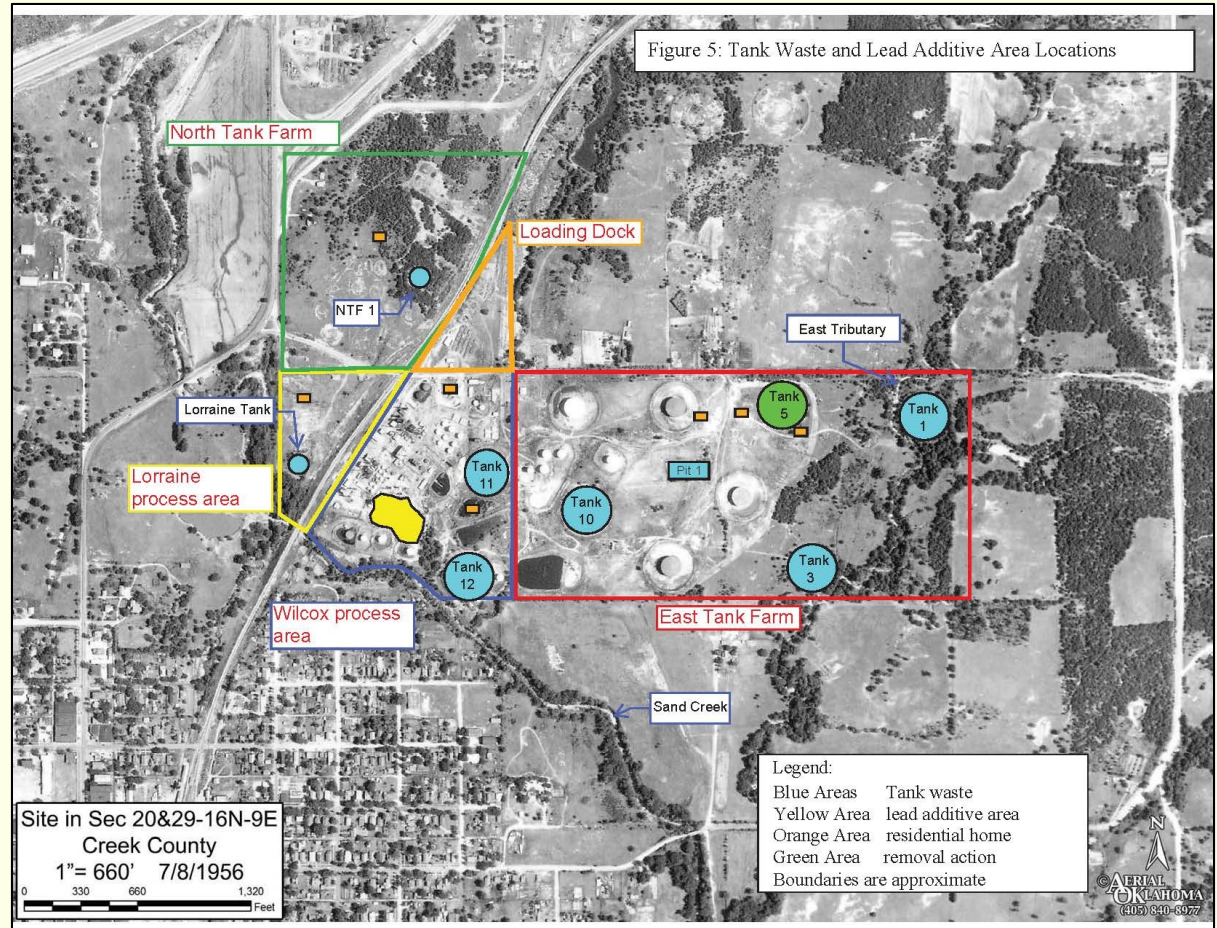


# Alternative Proposed

## Excavation, Treatment, and Offsite Disposal : Tank Waste and Lead Additive Area

### Benefits:

- 9 Sources removed
- 5 migration Pathways to the Creek removed
- 4 Residential Properties addressed
- Overall Site Risk Reduction: Human and Ecological

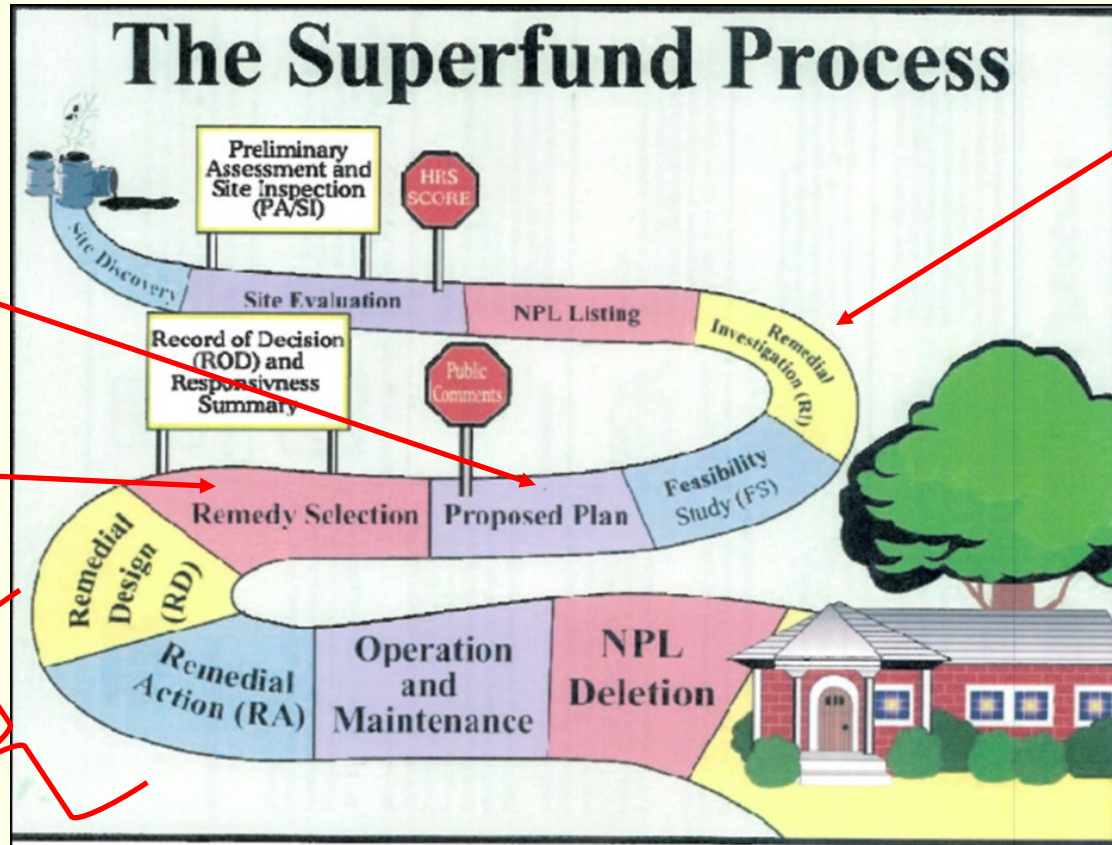


# Future Work

We are Here.  
Proposed Plan  
Source Control  
(2018)

Record of  
Decision  
Source Control  
(2018)

Source Control  
Design and Cleanup  
(planned 2019/2020)



We are Here.  
This work  
continues.

# Community Involvement

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## Contacts

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